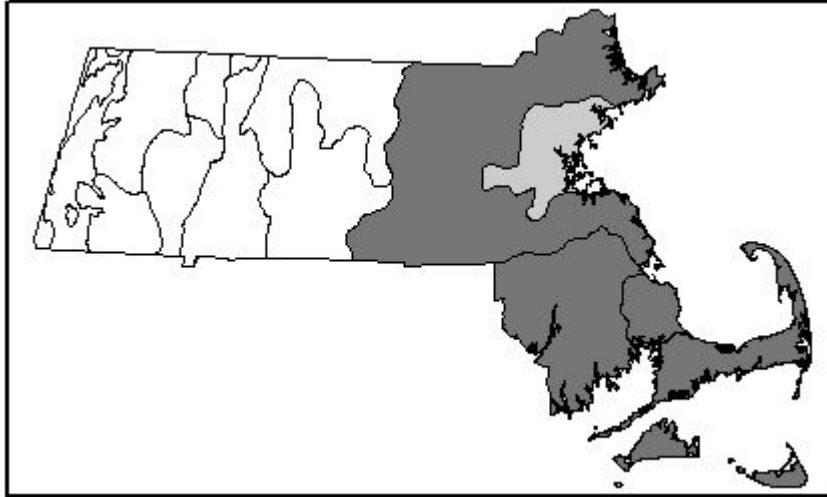


Community Name: COASTAL FOREST/WOODLAND

Community Code: CT1A2A2000

SRANK: S3



Concept: Coastal forests are often shorter than forests further inland, but taller than maritime forests. There is often a dense shrub layer and vines, particularly near the edges.

Environmental Setting: Communities are found in more protected areas along the coast, such as behind dunes and on slopes away from the water, and behind maritime forests. Coastal forests are sheltered from direct daily maritime influences [not in the daily salt spray zone, but receive wind and salt during storms]. The community occurs within the climate area moderated by being near the ocean, with warmer winters and cooler summers than more inland areas. Although they often occur on sand or bedrock that doesn't hold water, fogs and increased precipitation can produce more available water than further inland. Historically, fire was often an important factor in coastal forests. Coastal and maritime forests and maritime shrublands grade into each other, and into dunes and more inland forests.

Vegetation Description: Tree oaks (scarlet oak (*Quercus coccinea*), black oak (*Q. velutina*), white oak (*Q. alba*) and chestnut oak (*Q. prinus*)) are the dominant species of the coastal forest, with post oak (*Q. stellata*) important in the Buzzard's Bay and Island areas. Red maple (*Acer rubrum*), sassafras (*Sassafras albidum*), black cherry (*Prunus serotina*), tupelo (*Nyssa sylvatica*), beech (*Fagus grandifolia*), pitch pine (*Pinus rigida*), and white pine (*Pinus strobus*) commonly occur, usually in low percentages, but occasionally abundant. American Holly (*Ilex opaca*) is a regular associate in the southeastern Massachusetts occurrences of the coastal oak forest (where holly is abundant, the association may be called a coastal oak / holly forest). Red cedar (*Juniperus virginiana*) occurs in low percentages in the forests, and sometimes as a dominant in woodland thickets. A low-shrub heath layer dominated by low bush blueberries (*Vaccinium pallidum*, *V. angustifolium*) and black huckleberry (*Gaylussacia baccata*) is very characteristic. The herbaceous layer is typically sparse, with Pennsylvania sedge (*Carex pensylvanica*), bracken fern (*Pteridium aquilinum*), wintergreen (*Gaultheria procumbens*) and wild sarsaparilla (*Aralia nudicaulis*) being typical. Sweet pepper-bush (*Clethra alnifolia*), surprisingly, is abundant in many sites. Openings in the canopy produce a greater diversity of the herbaceous layer, where little blue-stem grass (*Schizachyrium scoparium*), Canadian rockrose (*Helianthemum canadense*), bush clovers (*Lespedeza* spp.), milkworts (*Lechea* spp.) and bearberry (*Arctostaphylos uva-ursi*) occur. Most occurrences of coastal forests have many vines on the edges and in openings of the forest. Poison ivy (*Toxicodendron radicans*), Virginia creeper (*Parthenocissus quinquefolia*), grape (*Vitis* spp.), and greenbriers (*Smilax* spp.) can be locally abundant.

Associations: Part of Oak - Pine forests. Includes White pine - oak - holly and white pine - oak - beech forests. Part of a continuum of dry, acidic communities that contain a variety of tree oak and pine species. More work is needed to define types.

Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife

Habitat Values for Associated Fauna:

No animal species are restricted to coastal forests. Animal species are those of typical coastal oak areas such as the birds Rufous-sided Towhees (*Pipilo erythrophthalmus*), Gray Catbirds (*Dumetella carolinensis*), Common Yellowthroats (*Geothlypis trichas*), Ovenbird (*Seiurus aurocapillus*) and Black-and-white Warbler (*Mniotilta varia*). Small mammals such as meadow voles (*Microtus pennsylvanicus*), and white footed mice (*Peromyscus leucopus*), are common with gray squirrels (*Sciurus carolinensis*) common in mainland forests. Moths, butterflies, and other insects of the southeastern oak and oak-pine forest occur in the coastal forests. As in all communities on peninsulas such as Cape Cod, or on islands, the more remote occurrences have fewer species than those closer to the mainland sources.

Associated Rare Plants:

TIPULARIA DISCOLOR

CRANEFLY ORCHID

E

Associated Rare Animals:

TERRAPENE CAROLINA

EASTERN BOX TURTLE

SC

Examples with Public Access:

Woods east side of Olde Barnstable Fairgrounds Golf Course, Barnstable; Provincetown Beech forest, Provincetown. Numerous sites on Martha's Vineyard.

Threats:

Management Needs:

Synonyms

USNVC/TNC:

Quercus velutina - Q. alba Forest Alliance -- Quercus coccinea- Q. velutina/ Sassafras albidum/ Vaccinium pallidum Forest [CEGL006375]; Fagus grandifolia- Quercus alba Forest Alliance -- Quercus velutina- Fagus grandifolia- Sassafras albidum/ Ilex opaca Forest [CEGL006378]; Includes: Fagus grandifolia- Quercus alba Forest Alliance -- Fagus grandifolia- Quercus alba- Liriodendron tulipifera- Carya spp. Forest [CEGL006075]; and Fagus grandifolia- Quercus alba- Q. rubra- Liriodendron tulipifera- Forest [CEGL006377]; and Fagus grandifolia/ Smilax rotundifolia Forest [CEGL006043]; and Quercus alba- (Quercus falcata, stellata) Forest Alliance -- Quercus (falcata, alba, velutina)/ Gaylussacia baccata- Vaccinium pallidum Forest [CEGL006373]; Part of: Pinus rigida - Quercus (coccinea, velutina) Woodland Alliance -- Pinus rigida - Quercus velutina / Hudsonia tomentosa Woodland [CEGL006120]; Pinus (rigida, echinata) - Quercus coccinea Forest Alliance Pinus rigida - Quercus coccinea / Vaccinium pallidum - (Myrica pensylvanica) Forest [CEGL006381]; Pinus strobus - Quercus (alba, rubra, velutina) Forest Alliance -- Pinus strobus - Quercus alba - Ilex glabra Forest [CEGL006382].

MA (old name):

MARITIME FOREST; and parts of SNE Dry Oak/Pine Forest on Sandy / gravelly soils.[CT2E1A0000]; and parts of CNE Mesic hardwood Forest on acidic bedrock / till [CT2G2B2000].

ME:

Part of: Oak- pine Woodlands Community and Oak - Pine Forest Community.

NH:

Part of: Dry Rich Appalachian oak- hickory- forest, Appalachian oak/ heath variant; in part: Beech Forest; in part: Pitch pine- Appalachian oak- /heath forest.

VT:

Not applicable.

NY:

Includes Maritime oak - holly forest and related to Maritime oak forest, and includes parts of Successional maritime forest; included in part of Pitch pine-oak forest AND Pitch pine- oak heath woodlands and Coastal oak- white pine forest (proposed).

CT:

includes: Pinus rigida - Quercus stellata Woodland; Quercus velutina- (Q. prinus) forests -- Q. velutina/ Gaylussacia baccata community And Q. velutina/ Vaccinium pallidum community; Pinus rigida - Quercus coccinea Woodlands, in part.

RI:

part of Oak - pine forest and Pitch pine - Oak Forest.

Weatherbee:

not applicable

Author:

P. Swain

Date:

8/5/99